

# The Thompson Vocal Eliminator™

Remove Vocals From The *Original*  
Standard Recordings.



*An Unlimited Source of Low Cost, Instantly  
Available Background Music!*

*When You Want Something Better  
Than Karaoke!*

Vocal Eliminator™, Thompson Vocal Eliminator™, and A Singer's Dream™  
Are Trademarks of LT Sound, Inc., Lithonia, GA

# Now You Can Become The Superstar Yourself, Backed By The Most Expensive Orchestras In The World!



The stage is set, the band is ready. All that is missing is You. Every singer has dreamed of hearing his voice surrounded by the most expensive orchestras in the world. Since 1976 the Thompson Vocal Eliminator™ has been making this dream come true for thousands of singer's all over the world.

## Unlimited, Low Cost, Instantly Available Background Music From the Original Source

### Unlimited Source of Background Music From Standard Recordings!

The Thompson Vocal Eliminator™ provides you with a virtually unlimited supply of background accompaniment. Because you are working from standard recordings and you are getting the background music of the original artist. You can also remove the vocal from FM, cable and television broadcasts even MP3 files - talk about instantly available low cost background accompaniment! You have immediate use of new material as soon as the recordings become available.

All of your favorite recordings with a solo or lead vocal part are potential sources of background music. Stereo recordings typically produce the best result, however the VE-4 can produce quite good results even on most mono recordings that are richly orchestrated. The Thompson Vocal Eliminator™ allows you to remove most or in some cases, virtually all of the lead vocal and leave most of the background instruments and background vocals untouched. Listen to the demo recording to hear the range of results and just how impressive the best results really are!

### The Original Recording and Not a Karaoke Imitation

Unlike Karaoke which is an imitation of the original recording without the vocal, we use the original recording. Anyone who has used karaoke backgrounds has had the experience of backgrounds which don't come close to the original in quality or arrangement style. This is understandable when you consider that some artists spend into the millions of dollars and take over a year recording one album! With the Thompson Vocal Eliminator™ you are working with the original recording.

### Gives You Backgrounds You Can't Get any Other Way

Only a fraction of the songs which have been recorded are available on Karaoke. With the Thompson Vocal Eliminator™ any recording with a solo lead vocal is a potential background. This gives you material which is unobtainable in any other way.

### Instantly Available Background Music From All Sources; Records, Tapes, CDs, Even FM Broadcasts and MP3!

Instead of waiting for a karaoke imitation of the song, you can work with the original as soon as it is released. No more waiting for backgrounds to come out and you can use material while it is still fresh and not after everyone is burned out on an over-played hit. The VE-4 works with all sources including Tapes, CDs, Records, Laserdiscs, Stereo TV and Radio Broadcasts, MP3 as well as any new formats which may appear in the future!

### Saves You Hundreds or Even Thousands of Dollars On Background Music

Typical Karaoke background tapes cost \$12 and usually have four or five songs on them. Often you only care about one of them. With the Thompson Vocal Eliminator™ You can even work from FM Broadcasts as well as other sources like MTV. Over time the Vocal Eliminator™ will save you hundreds or even thousands of dollars and give you instant access to background music unobtainable through any other method.

### Does Everything Karaoke Does... Better, and Gives You Advantages Karaoke Can't!

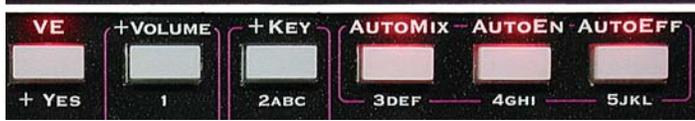
The VE-4 is *the best* way to do Karaoke! First of all you can do *all* types of karaoke for which you have players. You can use Karaoke tapes, CDs and DVD with standard players. The sound quality when using Karaoke backgrounds through the VE-4 is much better than through a karaoke system because of our superior vocal enhancement, key change, auto-mix and other features simply not found on Karaoke equipment. An average home system has sound quality and volume far better than the best portable karaoke units. Also our ability to produce fully professional recordings and serve as a mixer/ effects unit for a professional PA is a big advantage.

# Superior Quality and Ease of Use

## The Best of Both Worlds.

We have customers exemplified by two extremes. The highly technical "tweaky" type who wants control over every nuance of performance and the person who loves to sing and wants to produce truly professional results, but abhors complexity.

Happily the VE-4 meets the needs of these two extremes with no compromises for either customer. The secret lies in providing extremely intelligent algorithms which optimize the automatic functions of the product.



For the person who hates adjustments, simply engage **AutoMix**, **AutoEnhance**, and **AutoEffects** and the VE-4 automatically mixes the background music and the voice at the proper levels, automatically enhances your voice with virtually every studio trick in the book and automatically sets the echo and reverb levels to enhance your voice when the music is playing, and kills the reverb when the music stops. Simple operation ... highly professional results.

*"This is just a little note to let you know that I am sure having a lot of fun with my Thompson Vocal Eliminator. I didn't have any trouble at all learning how to operate it. I think the TVE is the greatest thing that has come along in a long time. - On many of my tapes, I sound like a real professional."*

G. Arthur - Georgia

For the tweaky type, hold the AutoEnhance button in and the adjustment menus give you access to incredibly detailed adjustments to tweak to your heart's delight. Same holds for the

Auto-Effects functions. You can even change the default targets for mixing levels to your preferences and store them with different pre-sets for practice, performance and recording.

### **MIX Magazine States:**

*"LT Sound's performance claims were quite accurate and their demo disc provided a very good sense of what the VE-1 could and could not do."*

**April - 88 Field Test**

The best of both worlds! The most simple automatic performance that requires no user knowledge or aptitude and gives you in effect an "invisible sound engineer" automatically adjusting parameters. Or the most robust detailed adjustment for control of the finest nuances.

Typically most customers will fall somewhere in the middle. They may love 95% of the adjustments but want to customize one or two functions to suit their particular tastes.

## It's Easy To Get Professional Results!

The Thompson Vocal Eliminator™ easily connects to your stereo system just like any other component. Our new Auto Vocal Trac™ elimination automatically adjusts each song for maximum vocal elimination. The VE-4 allows you to use pre-recorded stereo backgrounds, multiplex backgrounds, or the Vocal Eliminator™ backgrounds. There are convenient connections for your recorder be it cassette or CD burner.

Unlike other products start out at lower level of performance and remain there, your unit will continue to progress and stay abreast of technological improvements! Like the finest wine, your Vocal Eliminator™ will get even better with time, re-assuring in these days of products being constantly obsoleted by new technology.

## Complete

### With All The Features You Need to Produce Professional Results

#### Superior Vocal Enhancement - Find Out Just How Great Your Voice Really Can Sound!

Don't forget that *You* are the star of the show! The background music is just that, the background. *You* are the foreground! We provide professional vocal enhancement identical to what you hear on your best recordings rather the cheap echo effect found on most Karaoke units.



With the VE-4 you have *all* the tricks used in professional studios to make the singer sound his very best. With our upgradable FLASH program memory, new bells and whistles can be added with the product upgrades.

No matter what you are presently using to enhance your voice for either recording or performing, be prepared for an eye-opener or should we say "ear-opener" with the VE-4. It simply doesn't get any better for either recording or performance. Indeed, we will be marketing a stand-alone version without the vocal eliminator™ as a professional vocal processor and capture box for recording and performance.

#### Superior Quality Key Changer

Change the key of the song *without* changing the speed. Our key changer allows you to place the song in the key that helps you sound your best. You can go up or down a half octave, which allows you to place the song in *any* key. Our key changer compares favorably with studio units costing over \$3,000! The VE-4 also has a fine tune control allowing you to tune a song exactly to the pitch of another instrument such as a piano or guitar.

Even if you can "hit all the notes" in a song, you will be surprised how placing the song in the most comfortable key for your voice will make you sound better than you ever could being placed a key higher or lower than it should be.

#### Your Component Stereo, The Thompson Vocal Eliminator™ and a Mic Are All You Need\*

You can tell if you have a component stereo system if your tape deck is separate and has its own AC power cord. If you do not have a component stereo, but have Auxiliary inputs in the back of your system, you can usually connect to this type of system as well. Our tech support people will be happy to assist you at (770)482-4836 if you have questions.

\* **Note:** When recording from a tape as the original source you will need two separate tape decks. A double tape deck can count as only one buy not both because it will only allow you to record a duplicate of what is in the play side.



## Recording

### Cut Your Own CDs In Your Own Home Recording Studio

Easily record the backgrounds with or without your new vocal. Prepare background recordings with the vocal already removed for your live performances. Make recordings of "Your Greatest Hits", or make a demo to get bookings if you perform professionally. Recording and listening to your vocal work is also one of the best ways to improve your singing abilities and it's also great for vocal instruction.

*"I have been very pleased because now I can make an album/tape of myself with a fabulous background and no hassle and very little money. It was almost like a dream come true"*

*J. Eskridge - Illinois*

### Save Hundreds or even Thousands of Dollars on Recording Studio Fees.

Not only will you save money over going to a studio to record, many of our customers tell us they are getting better results at home than they ever were able to get in professional recording studios. You will be able to produce truly professional level recordings in the privacy of your own home with the VE-4. Quality will be limited only by the quality of the source and the quality of the recorder you use. And you can use *any* type of recorder with *either* analog or digital inputs - from cassette to CD burner.

With stand-alone economical CD recorders and personal computers with built-in CD burners, its easy and affordable to cut your own CDs. With the VE-4's optical and co-axial digital inputs and outputs, you can stay in the digital domain for the most professional quality results.

The VE-4 replaces the recording console and studio effects processors. There simply isn't anything a recording studio has to offer in the way of *qualitative* advantages over the VE-4. They can provide more tracks or channels of recording but that really doesn't change the overall quality of the recording you make or the way you enhance the voice to make it sound professional. The VE-4 will do all the things that give you a truly professional recording in the convenience and privacy of your own home without paying for recording studio time

## Performance

### Convert Your Home Stereo Into a High Quality Performance Sound System

The VE-4 is great for parties and to show off your singing abilities. Anyone who has listened to portable karaoke equipment knows you can get *much* better sound quality and volume from your existing stereo than from the small low quality speakers even the most expensive units have. With the VE-4 you will have everything you need to sound your very best. You will probably be shocked at how great you really can sound over your home system.

### Just Add Powered Speakers and CD Player and You Have The Ultimate PA.

The VE-4 is The Heart of a Professional Performance Sound System. It replaces the PA mixer, and the out-board effects units. This savings alone can pay for the cost of the VE-4 by itself. All you need to add are a pair of professional *powered* speakers. There are numerous economical, portable powered speakers like the JBL Eon and those made by Electro-Voice and others. You can use your existing tape players, CD, mini-disc, or MP3 for the background music.

The main reasons to go to something different than your home system are if you need more *sound volume* than your system can provide or need the ruggedness of professional gear. Do not expect better sound quality than you get from a high quality home system. At home your stereo is all you need.

### Automatic Mixing and Effects Simplify Recording and Performance Radically.

For most people, mixing the volume levels of the voice and music at the correct levels is one of the hardest things to get right. Either *they* are too loud or the *music* is too loud. The Auto-Mix function keeps your voice and the music in just the right proportions.

Our Auto-Effects is another LT Sound original. You want the delay and reverb on your vocal when you are singing, but don't want it when you are speaking between the songs. Auto-Effects™ knows just when to kill the reverb. Like Auto-Mix™ it can be easily bypassed for manual operation or you can manually kill the reverb if you prefer.

# Studio Quality

## Studio Quality Throughout

We are in an entirely different class of equipment than even "professional" Karaoke units. LT Sound builds some of the most sophisticated professional recording studio products available. The VE-4 uses advanced Digital Signal Processing or "DSP" to accomplish it's remarkable results.

It is a pleasure to offer a product which allows a totally inexperienced user to produce the highest level of professional results! As the inventor of the Thompson Vocal Eliminator™ we have consistently been known for producing the very best products available for vocal elimination, vocal enhancement, and key change of the background music. You are getting "Rolls Royce" level performance.

## Inherently Superior Component Approach For Better Sound Quality, and Versatility

Our approach since the beginning has been to make our unit a component as opposed to a stand-alone system. Even a mediocre stereo system provides better sound quality and components than the best stand-alone karaoke units on the market today. Also if you upgrade the performance of your stereo system's speakers or other components, our system benefits in the process which is not true of stand alone non-component systems.

*"When an associate of mine showed me his Thompson Vocal Eliminator, I was skeptical of it's operation. But after actually seeing it work, I am convinced that in my industry, it is the best piece of equipment I own.*

*Since my first introduction to the TVE, I have used it almost daily to make demo tapes and it has proven to be a reliable performer. Using the TVE, I am able to cut demo tapes without the use of bands and it eliminates relying on a performer's own demo tapes. In this way, I can cut my cost and increase my productivity.*

*The only way I can express my thanks for this great product is to say "Thanks" and I really do dig it!*

**M.Fox - N. Carolina**

# Upgradeable

## Upgradeable Program Memory Protects You From Obsolescence

If there is one factor above all others that we feel puts us light years ahead it is that, *provided you are the original purchaser*, your VE-4 is easily upgrade-able and at very low cost. Your unit does not have to come back to the factory to be upgraded. You can do it yourself in minutes by replacing the unit's internal flash memory chip. If you can change a light bulb, you can upgrade the software. It's that easy!

Don't let the fact that the VE-4 is actually a computer with audio inputs and outputs scare you. Unlike personal computers which can be difficult to use, the VE-4 is actually easier to use because it is computer based. It automatically does things you would have to manually have to do if it were not. The biggest advantage of being computer based is that how well it does it's job is determined by the software program it is running. The program is contained in FLASH memory chip that we will upgrade for a nominal cost provided you are the original purchaser.

So, your Thompson Vocal Eliminator™ is not only the best product today, it will remain so for years to come through upgrades which enhance the vocal elimination, vocal enhancement, and key change programs. Your first upgrade is free and subsequent upgrades are only \$35. We upgrade only units purchased factory direct. Used units purchased second hand are not subject to upgrade support and the warranty is not transferable as this is a special support service that is provided only to the original purchaser who buys directly from LT Sound.

## Five Year Warranty

LT Sound Products carry a Five Year Parts and Labor Warranty. This indicates our level of confidence in the reliability of the product. Having been in business since 1976 and still supporting our first products, you can feel comfortable that a five year warranty from us means something.

Optical Digital Inputs and Outputs in addition to the VE-4's Co-Axial Digital connections for input from a CD player with optical output or to the optical input of your CD Recorder

CoAxial Digital Inputs and Outputs in addition to Optical for broadest options.

For Analog signals select from two stereo pairs of inputs. The VE-4 has six analog outputs; Main Out, Recorder Out, and Aux Out.

Ultra Low Noise 48Volt Phantom Powered Mic Pre-Amp has a Unique and Proprietary topology that makes the VE-4 one of the best front ends for mic pre-amplification and Digital Capture of vocals at any price. Two Mics can be used with adapter.



# The Most Enjoyable Purchase You May Ever Make

When you consider all the benefits of the Thompson Vocal Eliminator™, it's quite easy to see why this may just be the most enjoyable purchase you will ever make! The hours and hours of enjoyment you receive from the Vocal Eliminator™ will make it the centerpiece of your entertainment system. The thrill of having your voice surrounded by some of the world's most expensive orchestras in the world is a satisfaction and pleasure unlike anything else you have experienced. You'll be able to share this enjoyment with your family and friends at get-togethers and through the tapes you make of your own greatest hits.



## Entertain and Impress Your Friends at Parties, Weddings, Talent Shows, or Family Events

Share the enjoyment of singing with your friends and family. Great for parties! Many customers also have used the Vocal Eliminator™ at weddings and family events as well as talent shows. The uses are limitless!

*"A year ago I purchased a Thompson Vocal Eliminator from your company. I'm writing to express my complete satisfaction in your products.*

*People can't believe how professional it sounds and how easy it is to eliminate vocals. I must admit at first when I read about your equipment, I was apprehensive. I didn't believe it was possible. After I ordered the equipment and put it to use, I know now I should have ordered it immediately. It was more than I had expected, much more!*

*I've never written a company to thank them for sending something I paid for. Your company deserves this recognition. Once again, Many Thanks for all you have done for me and a big Thank You to the Help Line"*

**R. Owens, Sr. - Maryland**

## Used by Individuals, Churches, Schools, Professional Performers and Vocal Instructors Since 1976!

Since LT Sound invented the Thompson Vocal Eliminator™ back in 1976, it has been used by literally thousands of people to meet their singing needs for background accompaniment. It is a quality product invented, designed, and manufactured with pride right here in the USA.

*"I have been very pleased with the TVE. I have shown it to two others who have also purchased TVE's after seeing and hearing mine."*

**R. Brady - Tennessee**

The Vocal Eliminator™ is priced economically enough for an individual to afford, yet it has a host of other uses as well. Professional entertainers use it in performances and demos. Vocal instructors use it for teaching. Churches use it in their music programs. Schools use it for instruction, performance, and plays. Night clubs use it for sing-alongs, amateur nights, and talent contests. Radio stations use it in commercial production and promotions. Beauty contests use it in talent competition. Even MTV uses it on their "Lip Service" program where contestants sing with the music video replacing the original artist!

Wherever there is a need for economical, quality background accompaniment, you are likely to find the Thompson Vocal Eliminator™.

*"Earlier this year I purchased a Thompson Vocal Eliminator from you. To tell you that I am extremely pleased with it would be an extreme understatement. I used it with students in a recital. Both they and their parents were favorably impressed."*

**C. Wilkinson - Virginia**



# Additional Information

## How It Works.

Needless to say, the VE-4 is a far different Vocal Eliminator™ than our original product invented back in 1976. Our original analog Vocal Eliminator™ relied on a technique of subtracting one channel from the other removing the center channel information from a stereo recording. Though this worked quite well with some material, it sometimes resulted in substantial loss of instruments such as drums and bass which might be placed in the center of the mix. This produced a very wide range of results from one recording to the next. If stereo reverb was used on the singer, quite a bit of reverb could remain on some recordings. Additionally, all of the stereo effect was lost resulting in a monaural background recording.

The VE-4 uses far more advanced proprietary digital signal processing techniques and the primary algorithm we use to remove the vocal is not center channel removal. The VE-4 can produce usable background music even on many mono recordings. Stereo recordings still produce the best sounding backgrounds, because we can use a *highly modified* center channel removal algorithm which does not remove the drums and bass as a "helper algorithm". Since we are relying on the mono algorithm primarily, we avoid almost all of the center channel instrument losses and retain the almost all of the original stereo effect. The VE-4 also reduces any reverb to negligible levels. The VE-4 normally automatically chooses the best mix of algorithms for your particular recording, but also allows you to choose manually between several types of algorithms if you are so inclined.

What is very interesting is that we have yet to hear a copy of even our original center channel subtraction algorithm that worked as well as our first eliminators made back in the seventies! Vocal Elimination is our "mission in life" as a company. The proof is in the pudding. We are the best in our field and indeed the only company specializing in this arena and the only serious product for removing vocals.

## How Well It Works.

Because the VE-4 is upgradeable and the current level of performance will undoubtedly change, we would direct you to our web site at <http://www.LTSound.com> for the latest information and demos on the VE-4. The following results were assessed at the VE-4's introduction in December, 2000. With a broad sampling of stereo records by solo artists the results can be broken down into about four categories.

**25%** Vocals will be virtually inaudible through most of the record, even without the addition of your new vocal.

**50%** Vocal will be barely audible without your new vocal being added and completely inaudible with the addition of your new vocal.

**15%** Vocal will be audible but at a substantially reduced volume. Complete masking of the original is possible but requires a high quality new vocal with equalization and echo or reverb like that provided by the VE-4.

**10%** Borderline or non usable results.

The primary variable is how loud the background music is relative to the voice. The louder the background music, the better the result in general.

## Let Us Show You How Well the Thompson Vocal Eliminator™ Works on Your Recordings!

Send us between six and twelve song selections and we'll be happy to provide you free 30-45 second excerpts to show you how the Vocal Eliminator™ will work on your individual recordings. We need to work from the *original* store bought record, tape or CD rather than a duplicate tape you make of your recordings. However, we can work from a CD copy of your recordings if you have a CD recorder. You are also better off sending six different albums by different artists than one album as a variety will give you the greatest overview of how well your recordings are going to work. We will provide the cassette tape to record the demo on and pay the postage to return your original recordings to you along with your demo.

## Yes, It's Perfectly Legal!

Many people wonder about the legalities involved with the Thompson Vocal Eliminator™. In fact, using the Vocal Eliminator™ itself is perfectly legal. The only legal questions revolve around the copyright laws and the taping of your recordings. Whether you eliminate the voice or not is absolutely irrelevant to whether or not your taping falls under the "Fair Use" or permitted recording provisions of the copyright laws. You can even tape recordings with or without your new vocal as long as you do so under the "Fair Use" provisions of the copyright law. To fall under these provisions, it is generally acknowledged that you must be taping a recording which you have purchased or own and the tape copy must stay in your possession or control.

Many people confuse copyright laws with performance royalties involving BMI and ASCAP. Performance royalties may be due if you perform a song in a commercial environment. If performance royalties are due, it makes no difference whatsoever whether you are using a live 40 piece orchestra, the Vocal Eliminator™, or even singing a'capella for that matter. Performance royalties are usually paid by the club or establishment owner on an annual basis to BMI or ASCAP.

Even making a tape or CD copy of recordings you own and using that recording to sing in a paid professional performance is generally regarded to fall under the fair use provisions of the copyright law. There are clearly recording applications which fall outside the law. Making complete recordings as opposed to demo excerpts of your records and selling or distributing them to others is clearly a violation.

## Specifications:

Dynamic Range: 101.6 dB Awtd  
20 bit 44.1kHz - 48 kHz Sampling Rate  
DSP Processor - Analog Devices 32 Bit  
**SHARC** Floating and Fixed Point Processor  
with a 32 bit wide data path and  
memory.

Frequency Response: 10 Hz - 20 kHz +/- 1 dB  
Analog Line Inputs: 4 ; Two Stereo Pairs  
Digital Inputs : 2 ; 1 Optical, 1 CoAxial  
Digital Outputs : 2 ; 1 Optical, 1 CoAxial  
Mic Inputs: 1 Low Impedance (100-600 ohms)  
Ultra Low Noise - 48 V Phantom (switchable)  
Dimensions: Rack: 19.0 W, 1.75H, 7.25D  
Shipping Weight: 8lbs. or 3.6 Kg

# History of Sing Along or "Karaoke"

It's amazing how many people actually believe the Japanese "invented" Karaoke. Sort of like people believing the transistor which was a US discovery by Bell Labs was invented by the Japanese. Karaoke means "empty orchestra" in Japanese. It is true that they popularized the concept both in this country and in Japan. However the main roots of this phenomenon are in the United States.

First of all there was "Music Minus One" which was started by Irv Kratka back in 1951. They produced many orchestrations with the music on one channel and the voice on the other. You could use just the channel with the background music if you wanted to sing. They still produce background tracks under the "Pocket Songs" label and are known for producing the largest variety of quality backgrounds.

As to the idea of placing words on a screen so people could sing along, well credit Mitch Miller and his TV program "Sing Along With Mitch". Another US contribution.

In 1976 Lacy Thompson, Jr. with the help of Dr. Gene Patronis, a professor at GA Tech invented the Thompson Vocal Eliminator™. This allowed the use of the original standard Stereo Recordings.

There is some dispute as to who's idea it was to put the tape player, amp and speakers into a sort of "boom box" with mic inputs. We clearly think this is a mistake from a quality point of view. It does give you portability. A gentleman in the Phillipines says he was the first. This is perhaps the only part of the phenomenon which was not a "Born In the USA" contribution.

## LT Sound History and Warranty

LT Sound manufactures the Thompson Vocal Eliminator™ and is known for producing some of the most sophisticated recording studio equipment. Since 1976 LT Sound has produced professional products that are simple enough and affordable for the amateur. Innovation and "firsts" are our hallmarks. We are the only manufacturer who is trying to bring the quality level which recording studios have enjoyed to professionals and amateurs who have a passion for singing. We feel anyone who takes the time to educate himself to the important advantages our products offer

will come to the conclusion that we are the only player whose purpose is to constantly advance the level of performance and bring about those advances through low cost software upgrades so the product you buy today is not obsolete in six months.

### Five Year Warranty.

We build a superior product which is designed and manufactured in the USA. We have a Five Year Parts & Labor Warranty which is in sharp contrast to the typical "90 Day" warranty you will find on imported products.

## LT Sound

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